J Canc Educ
DOI 10.1007/s13187-014-0705-z

Predictors of Cancer Fear: The Association Between Mass Media and Fear of Cancer Among Cancer Diagnosed and Nondiagnosed Individuals

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Abstract Few studies have explored the impact of mass media on fear of cancer levels. This study investigates whether television and Internet use are associated with fear of cancer, and whether this association is different for cancer diagnosed and nondiagnosed individuals. A quantitative, standardized survey was used and administered to 2008 respondents in Flanders (Belgium), of which 621 individuals were diagnosed with cancer. For statistical analyses, hierarchical regression analyses, independent samples *T*-tests and post hoc mediation analyses were conducted. The results indicated that cancer diagnosed individuals differed from nondiagnosed individuals in terms of perceived cancer susceptibility, perceived cancer severity, fear of cancer, and media use. Furthermore, television exposure was directly and positively related to fear of cancer, whereas Internet use was not. The relationship between television and Internet use and fear of cancer was not different for cancer diagnosed and nondiagnosed individuals. Additional post hoc mediation analyses, however, seemed to suggest that watching more television and surfing more on the Internet could both lead to having a more negative perceived health and this was in turn associated with higher fear of cancer. To help reduce the burden of fear of cancer, cancer educators and individuals working with cancer patients need to be aware of the possible negative effects media use might have on health perception and on the levels of fear of cancer.

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Published online: 01 October 2014

Keywords Fear of cancer · Mass media · Cancer severity · Health perception · Cancer patients

Introduction

The World Health Organization (WHO) has estimated that every year, 14 million new cases of cancer are diagnosed worldwide [1]. Because of this high prevalence and its (perceived and real) consequences for either survival or quality of life, cancer has a frightful and negative connotation and fatalistic beliefs concerning cancer live in a large part of the population [2]. A critical review of breast cancer screening behavior concluded that when studying screening behavior, the notion of fear, worry, or anxiety is one of the most investigated emotions [3]. However, there does not appear to be a consensus in the current literature on what the predictors of fear are. Past research has focused mostly on fear as a predictor of behavior. For example, some health behavior theories such as the health belief model [4] and the extended parallel processing model [5] suggest that fear could be a predictor of preventive behavior [e.g., 6]. However, fear effects on behavior are not always positive. Research has shown that fear could also create negative behavior changes, such as deliberate information avoidance [e.g., 7]. Both health behavior theories also consider perceived susceptibility and perceived severity as important predictors of health behavior [8]. Perceived susceptibility is generally defined as the "subjective perception of the risk" [9] or the belief of an individual's likelihood to get a certain disease [5]. Perceived severity is defined as the feelings of the severity associated with a certain disease or threat [5]. Together, perceived susceptibility and perceived severity form the perceived threat of a disease [5, 8]. The concept of perceived threat is related to fear. Fear is defined to be an emotion, while threat is defined as a cognition. In the extended parallel process model, these two concepts

are positively associated: the higher one's perceived threat, the higher this individual's fear [5].

The health belief model identifies mass media as one of the "cues to action" for lay individuals to evaluate certain health actions and behaviors [9]. According to the agenda-setting theory [10], the media often function as "gatekeepers" for information that the lay public has no prior knowledge of [11]. Consequently, mass media are often named as a source from which individuals receive medical information and from which they learn about health and cancer [e.g., 12, 13]. Moreover, recent developments in the media landscape have generated an enormous amount of health and cancer information [11]. A large European survey found that 20 % of Europeans pointed to television as their main source for health information and almost 40 % viewed television as an additional source for health information [14]. In addition, individuals who have been diagnosed with cancer have been reported to use media even more extensively and to seek more health information [13]. As early as 1969, the print media were shown to be a leading source for health information [15]. More recently, health information available on the Internet has boomed dramatically [11, 16]. Content analyses have shown that both in print media, and on television and the internet, cancer stories were highly prevalent [11].

As the media contain multiple messages concerning health and cancer (as diverse as cancer stories in online support groups, in television soaps, news, etc.), exposure to these messages might affect levels of fear. For example, one content analysis showed that articles in news magazines concerning the human papillomavirus (HPV) vaccine contained fear-inducing messages [17]. A growing number of scholars is investigating the way lay individuals use the media to obtain information about cancer and its effects on knowledge, attitudes, health beliefs, and preventive behavior [e.g., 18]. However, research concerning the impact of mass media on fear of cancer is still scarce. One study [20] found a positive relationship between television news exposure and fear of breast cancer. However, it appears that, to date, very few studies have investigated the relationship between television and Internet exposure on the one hand, and fear of cancer on the other hand.

The main aim of this study is to examine whether there is a relationship between the volume of television and Internet use and fear of cancer. As previous research showed that individuals with a cancer diagnosis use the media more extensively for health information [13], and since fear of cancer is likely to be higher in cancer diagnosed individuals, this study also wants to test whether this relationship differs for cancer diagnosed and nondiagnosed individuals. In particular, the following research questions are addressed:

RQ1: Are television exposure and Internet use related to fear of cancer?

RQ2: Is this relationship different for cancer diagnosed and nondiagnosed individuals?

Method

Data Collection

This study used data from the Leuven Cancer Information Survey (L-CIS). The L-CIS was a cross-sectional survey, using a standardized questionnaire in a convenience sample (N=2,008) of cancer diagnosed individuals (n=621) combined with nondiagnosed individuals (n=1,387) in Belgium. A variety of strategies was used to recruit these respondents. Cancer diagnosed individuals were contacted through different Dutch speaking online cancer forums and through different Flemish cancer self-help groups. The members of these forums and self-help groups were asked to fill in an online survey or a paper questionnaire, if they did not have access to the Internet. The paper questionnaires were administered through postal mail and were accompanied with a stamped and addressed envelope. Finally, a research assistant was present in the oncology waiting room in a large teaching hospital in Flanders and asked patients whether they were willing to take part in the study. The patients that agreed to participate completed the questionnaire in the waiting room or, if requested, also received a stamped and addressed envelope to fill in the survey at home and send it back.

Apart from individuals diagnosed with cancer, a convenience sample of the general public was approached through a random sample of adult education centers in Flanders. These centers were contacted with the request to contribute to a study on health and cancer information. The participating schools then were asked to put a link to the survey on their online learning environment. The L-CIS was approved by the Ethics Review Board of Human Sciences of the University of Leuven.

Measures

Background Variables

Gender, date of birth, and highest obtained level of education were included in the L-CIS. Date of birth was recoded into a numeric variable with the current age of the respondent. Respondent's direct (personal) and indirect experiences with cancer were assessed. The question "Have you ever been told by a doctor that you had cancer?" [13] was queried to measure direct, personal experience with cancer. Answer categories were "yes" (=1), "no" (=0) and "yes, but it was a misdiagnosis" (=0). This last group was included among the nondiagnosed respondents.

As has been done in earlier studies [18], indirect experience with cancer through close family members was assessed with the question: "Do you have any brothers, sisters, parents or children who have or had cancer?" Answering categories were "no" (=0) and "yes" (=1).

Health perception was measured with the question "How would you describe your own health?" with answering categories ranging from "poor" (=0) to "excellent" (=4) [19].

Perceived Cancer Susceptibility and Severity

To assess perceived cancer susceptibility, all respondents (cancer diagnosed and nondiagnosed individuals) were asked "How likely do you think you are to get cancer in the future?" This question was adapted from the Health and Media Interview Survey [20]. Answers were coded on a 7-point Likert scale from "this is certainly not going to happen" (=0) to "this is certainly going to happen" (=6). The L-CIS included perceived cancer severity by asking all respondents "How severe do you think cancer is?" Answers were coded on a 6-point Likert scale ranging from "not severe at all" (=1) to "very severe" (=6).

Exposure to Media

The total weekly amount of television use was assessed using the television viewing index designed for the Swedish Media Panel Program [21] and adapted for use in the Dutch language [22]. This index made a distinction between weekdays, Fridays, Saturdays, and Sundays. Hours of viewing television were queried for each type of day with the question "On an average weekday/Friday/Saturday/Sunday, how many times do you watch television?" Answer categories ranged from "never" to "every day/Friday/Saturday/Sunday". Next, respondents were asked "If you watch television on a regular weekday/Friday/Saturday/Sunday, indicate how many hours you usually watch on one day". Answering categories included blocks of half an hour ranging from "0 hours" until "5 hours and more". These variables were used to calculate the total number of hours of television viewing per week (number of television viewing hours during a weekday × total days per week + weighted number of hours television viewing on a Friday/Saturday/Sunday = total number of hours of weekly television viewing).

Internet use was assessed with three questions: "How much time do you spend surfing the Internet (not for work purposes) on an average weekday/Friday/weekend day?" This was an open question and respondents could indicate the number of hours and/or minutes. These time volumes on weekdays, Fridays, and weekend days were weighted and summed to form a variable containing the estimated total weekly hours of Internet use.

Cancer Fear

Fear of cancer was measured with eight questions, based on the Breast Cancer Fear Questionnaire [23]. These questions were adapted to address cancer in general. Respondents were asked to indicate how much they agreed with a series of statements about cancer. Eight statements were presented (e.g., "The thought of cancer scares me" and "When I think about cancer, I feel nervous") with the following response rates: "strongly disagree" (=0), "disagree" (=1), "neutral" (=2), "agree" (=3), "strongly agree" (=4). A principal axis factor analysis generated a single factor with an Eigenvalue of 5.80. Factor loadings ranged from 0.72 to 0.90 and the factor explained 72.54 % of the variance (Cronbach's α=0.95).

Statistical Analyses

Independent samples *T*-tests, hierarchical linear regression analyses with interaction tests, and mediation analyses were conducted with SPSS (version 22.0, IBM Corp., Armonk, NY). For the regression analyses, the independent variables were entered in separate blocks: (1) sociodemographic variables; (2) health perception and (in)direct experience with cancer; (3) perceived cancer susceptibility and perceived cancer severity; and (4) exposure to television and the Internet. Media were entered in the last block, to examine whether this block explained a significant part of the variance beyond what was already explained by blocks 1, 2, and 3. Post hoc mediation analyses were conducted with model 4 of the PROCESS script [24] in SPSS. This is a regression-based tool to conduct conditional process analyses.

Results

Sociodemographics of the Total Sample

Thirty-one percent (n=621) of the total sample (N=2,008, including diagnosed and nondiagnosed individuals) had been diagnosed with cancer, and 37.9 % of the total sample (n=763) had a close family member who had been diagnosed with cancer.

Seventy percent of the total sample was female. Respondents' age ranged from 16 to 88 years old (M=43.41, SD=16.56). Six percent was 20 years or younger, 25.2 % was ages 21 to 30, 12.8 % was 31 to 40, 15.6 % was 41 to 50, 21.9 % was 51 to 60, 15.2 % was 61 to 70, and 3.1 % was 71 years or older. This is partly consistent with the population statistics of Belgium in 2012 (20.4 % was younger than 18 years, 61.9 % was between 18 and 64 and 17.7 % was 65 years old or higher) [25].

Fifteen percent of the respondents in the total sample had no high school diploma, 29.5 % had a high school diploma, 34.1 % had a college diploma, and 22.6 % a university diploma. When checked for health status, 4.4 % of the respondents in the total sample rated their health as poor, 23.6 % as fair, 44.9 % as good, 24.2 % as very good, and 3.0 % as excellent.

Prevalence of Fear of Cancer

This 8-item scale had a range from 0 to 32, with a mean score of 14.04 (SD=7.74) in the total sample. Following Champion et al. (2004) scores ranging from 0–7 were defined as "low fear", 8–15 as "moderate fear", and 16–32 as "high fear". Of the total sample, 19.7 % had low fear of cancer, 33.8 % moderate fear of cancer, and 46.5 % high fear of cancer.

When specific subgroups were considered, the average score of fear of cancer ($t(1,892)=-5.76$, $p<0.001$) for nondiagnosed individuals was slightly lower ($M=13.37$, SD=7.50) compared to the score of cancer diagnosed individuals ($M=15.59$ and SD=8.06). This was also the case ($t(1,886)=-2.53$, $p<0.05$) for individuals with indirect experience ($M=14.63$, SD=7.68) and individuals without indirect experience ($M=13.70$, SD=7.76).

Perceived Susceptibility and Perceived Severity of Cancer

On a scale ranging from 0 (no risk) to 6 (certain to get cancer), the mean perceived cancer susceptibility of the total sample was 2.94 (SD=1.27). Only 2.3 % of the respondents reported that they certainly were not likely to get cancer in the future. Twenty-six percent perceived their probability to get cancer to be (very) low, while 50.1 % stated that they had a chance to get cancer. Finally, 16.8 % stated that they had a (very) high probability to develop cancer and 5.1 % was certain that they would get cancer in the future.

There was no significant difference in perceived cancer susceptibility between women and men ($t(1,917)=-0.05$, $p=0.96$). Unsurprisingly, a significant difference between individuals with ($M=3.54$, SD=1.44) and without ($M=2.70$, SD=1.10) a cancer diagnosis was found in perceived susceptibility ($t(820.89)=-12.35$, $p<0.001$). Individuals with indirect cancer experience scored higher ($t(1,910)=-7.76$, $p<0.001$) on the perceived cancer susceptibility perception question ($M=3.22$, SD=1.30) compared to individuals without indirect cancer experience ($M=2.77$, SD=1.22).

In general, in the total sample, most participants perceived cancer to be severe (ranging from 1 to 6, $M=5.67$, SD=0.63). Only 0.9 % of the respondents did not perceive cancer to be severe. Four percent of the respondents indicated that they found cancer to be "somewhat severe", 22.0 % found it "severe", and 73.0 % found it a "very severe disease".

However, when specific subgroups were examined, a significant difference was found between men and women ($t(901.05)=-4.87$, $p<0.01$). Women considered cancer to be slightly more severe ($M=5.71$, SD=0.59) than men did ($M=5.55$, SD=0.70). There was no significant difference ($t(1,603.71)=-1.43$, $p=0.154$) of the perceived cancer severity between individuals with and without indirect cancer experience. However, nondiagnosed individuals perceived cancer to be slightly more severe ($M=5.70$, SD=0.61) than cancer diagnosed individuals ($M=5.59$, SD=0.67) ($t(1,049.39)=3.43$, $p<0.01$).

Media Exposure

The respondents of the total sample watched television for 11 h and 56 min per week on average ($M=11.94$, SD=8.68) and surfed the Internet for 12 h and 5 min ($M=12.09$, SD=10.86), not including surfing for work purposes.

T-tests yielded significant differences between individuals who had received a cancer diagnosis in the past and individuals who had not, both for television ($t(998.58)=-9.10$, $p<0.001$) and Internet use ($t(1,387.22)=8.69$, $p<0.001$). Individuals with a cancer diagnosis watched more hours of television per week compared to nondiagnosed individuals ($M=14.93$, SD=9.44 versus $M=10.59$, SD=7.96), and diagnosed individuals used the Internet fewer hours ($M=9.17$, $SD=9.06$) than those without a cancer diagnosis did ($M=13.35$, SD=11.32).

Regression Analyses

Hierarchical, linear regression analyses on the whole sample were used to test the research questions. This regression model explained 11 % of the variance of fear of cancer ($R^2=0.106$, $F(10; 1,674)=20.95$, $p<0.001$). Gender ($\beta=0.09$), perceived health ($\beta=-0.15$), perceived susceptibility ($\beta=0.11$), and perceived severity ($\beta=0.12$) were all significant predictors of fear of cancer. Television viewing volume ($\beta=0.15$) predicted fear of cancer, while Internet volume ($\beta=0.00$, $p=0.954$) did not. Thus, individuals who indicated to watch more hours of television per week, appeared to have higher scores for fear of cancer. In this model, the addition of media use improved the explained variance of the model significantly ($\Delta R^2=1.8$ %, $p<0.001$). The results of these analyses are displayed in Table 1.

Next, it was examined whether the relationship between television and Internet exposure on the one hand, and fear on the other hand was different for cancer diagnosed and nondiagnosed individuals. Two interaction terms between having had a cancer diagnosis and television use on the one hand, and having had a cancer diagnosis and Internet exposure on the other hand, were added as predictors to the model. This to test whether having a cancer diagnosis moderated the relationship between media use and fear of cancer. Yet, these interaction terms were not significant for television volume

Table 1 Hierarchical regression analysis to identify determinants of fear of cancer

	Fear of cancer		
	β	*p*	ΔR^2
Step 1			*1.9 %***
Gender	0.09***	0.000	
Age	0.00	0.993	
Degree	0.02	0.351	
Step 2			*4.6 %***
Health perception	−0.15***	0.000	
Direct experience cancer	0.03	0.305	
Indirect experience cancer	0.00	0.875	
Step 3			*2.9 %***
Perceived cancer susceptibility	0.11***	0.000	
Perceived severity cancer	0.12***	0.000	
Step 4			*1.8 %***
Hours television per week	0.15***	0.000	
Hours Internet per week	0.00	0.954	

N=2,008 (total sample). Standardized regression coefficients (betas) are used for all blocks

*$p<0.05$; **$p<0.01$; ***$p<0.001$

(β=−0.02, p=0.554), nor for Internet use (β=−0.03, p=0.283). The addition of these interaction terms did not significantly increase the explained variance of the model (ΔR^2= 0 %, p=0.441). In sum, television viewing appeared to be a positive predictor of fear of cancer regardless of having had a cancer diagnosis or not, while the Internet was not directly related to fear of cancer, and this did not differ for cancer diagnosed and for nondiagnosed individuals.

Mediation Analyses

As it was surprising that no difference in the relationship between media use and fear was observed for cancer diagnosed and nondiagnosed individuals, additional post hoc mediation analyses were conducted to examine whether individuals' perceived health mediated the relationship between television use, Internet use, and fear of cancer. A significant partial mediation effect was found of television exposure (*X*) on fear of cancer (*Y*) through perceived health (*M*), with gender, age, and degree as control variables (=model 1). Furthermore, perceived health (*M*) also played a mediating role between Internet use (*X*) and fear of cancer (*Y*) (=model 2), after controlling for gender, age, and degree. The results of this analysis are presented in Table 2. This table displays the direct predictors of health perception and the direct predictors of fear of cancer in the two models (unstandardized coefficients). Overall, these results indicate that for model 1, television exposure (coeff.= −0.13, $p<0.001$), age (coeff.=−0.01, $p<0.001$) and degree (coeff.=0.09, $p<0.001$) are significant predictors of perceived health. Furthermore, perceived health (coeff.=−1.65, $p<0.001$), television exposure (coeff.=0.94, $p<0.001$), and gender (coeff.=1.85, $p<0.001$) were significant indicators of fear of cancer. For model 2, Internet volume (coeff.=−0.03, $p<0.05$), age (coeff.=−0.01, $p<0.001$), and degree (coeff.= 0.13, $p<0.001$) were significant predictors of perceived health, while perceived health (coeff.=−1.92, $p<0.001$) and gender (coeff.=1.82, $p<0.001$) predicted fear of cancer.

The results for model 1 show an unstandardized direct effect of television exposure on fear of cancer (coeff.=0.94, 95 % confidence interval (CI) 0.64–1.25, $p<0.001$). Bias-corrected bootstrap confidence intervals for the indirect effect indicate that watching television is indirectly related with fear of cancer through perceived health (coeff.=0.21, 95 % CI 0.14–0.31). For model 2, no direct effect was found of Internet use on fear of cancer (coeff.=0.02, 95 % CI -0.22-0.25, p= 0.877). However, bias-corrected bootstrap confidence intervals for the indirect effect in this relationship, through health perception, showed an indirect mediation effect (coeff.=0.05, 95 % CI 0.01–0.11).

Discussion

The main goal of the current study was to examine the relationship between television and the Internet on the one hand, and fear of cancer on the other hand. This was tested for both cancer diagnosed and nondiagnosed individuals. Consistent with previous research [20], and in response to RQ1, television exposure was significantly and positively related to fear of cancer. Furthermore, being female, scoring lower on perceived health, having a higher perceived cancer susceptibility, and perceiving cancer as more severe were all significant determinants of fear of cancer.

Surprisingly, Internet use was not a direct predictor of fear of cancer (RQ1). Because of the impressive amount of cancer information online [11], it was expected that Internet use would also be positively related to fear of cancer. Yet, the results of this study only found support for a direct relationship between television exposure and fear of cancer. The data suggest that television remains a medium that is frequently used and might shape individuals' attitudes and perceptions.

Regarding RQ2, the specific relationship between television and Internet exposure and fear of cancer did not differ for cancer diagnosed individuals and nondiagnosed individuals. However, some differences between these two groups were found, with cancer diagnosed individuals scoring higher on perceived cancer susceptibility and media use. Cancer diagnosed individuals and individuals with indirect cancer experience also scored slightly higher on fear of cancer. However, it has to be noted that fear of cancer was relatively high in

Table 2 Output of the Hayes PROCESS script for SPSS to test the mediating role of perceived health between television viewing volume/Internet use volume and fear of cancer

Model 1: television viewing volume			Model 2: Internet use volume		
Outcome health perception[a]	Coefficient	*p* value	Outcome health perception[c]	Coefficient	*p* value
Hours of television per day	−0.13***	0.000	Hours of Internet per day	−0.03*	0.039
Gender	−0.06	0.196	Gender	−0.07	0.111
Age	−0.01***	0.000	Age	−0.01***	0.000
Degree	0.09***	0.000	Degree	0.13***	0.000
Outcome fear of cancer[b]			Outcome fear of cancer[d]		
Perceived health	−1.65***	0.000	Perceived health	−1.92***	0.000
Hours of television per day	0.94***	0.000	Hours of Internet per day	0.02	0.877
Gender	1.85***	0.000	Gender	1.82***	0.000
Age	0.01	0.620	Age	0.02	0.101
Degree	0.25	0.151	Degree	−0.04	0.791

N=2,008 (total sample)

[a] Model summary: R^2 =0.09, $F(4; 1{,}767)=41.22$, $p<0.001$

[b] Model summary: R^2 =0.08, $F(5; 1{,}766)=30.96$, $p<0.001$

[c] Model summary: R^2 =0.06, $F(4; 1{,}836)=29.23$, $p<0.001$

[d] Model summary: R^2 =0.06, $F(5; 1{,}835)=24.84$, $p<0.001$

the entire sample. Similarly, cancer was perceived to be a very severe disease by the whole sample, not only by individuals who experienced it in their personal life or among their family members. Women and nondiagnosed individuals perceived cancer to be more severe than men and cancer diagnosed individuals.

As the relationship between media use and fear did not differ for cancer diagnosed and nondiagnosed individuals, additional post hoc mediation analyses were conducted to examine the role of perceived health. These analyses showed that both television and Internet use were negatively related to health perception. Respondents who used these media frequently perceived their own health as more negative. In turn, health perception was a direct negative predictor of cancer fear. The lower respondents perceived their health to be, the higher they feared cancer. Thus, there appeared to be an indirect relationship between both television and Internet use on the one hand and fear of cancer on the other hand via respondents' health perception.

In spite of the high volume of cancer information both online and on television, the results of this study suggest a direct, positive relationship between television viewing volume and fear of cancer, but not for Internet volume. An explanation for this remarkable difference probably cannot be found without more detailed information about the types of content people expose themselves to when they consume these media. For instance, many cancer-related messages on television are presented in an entertainment context, with vivid imagery and characters the viewers are known to identify with. Cancer information on the Internet is probably more often of a purely informational type. Both types of information are processed differently by media users and their potential effects are therefore also likely to be different.

The results of the present study have important implications for health providers and policy makers as fear of cancer could have both positive and negative effects on attitudes and behavior. As suggested in the literature, fear of cancer might increase individuals' likelihood to engage in preventive health behavior [6], but might also lead to the avoidance of health information [7]. Health professionals, prevention workers, and cancer educators should be aware of the possible impact individuals' media use might have on health perception and fear levels, so they can take this into account in their communication to, and in interaction with the public and with specific groups such as cancer patients.

There are a number of limitations to this study. First, the data are cross-sectional and based on a convenience sample. The usual care has to be taken about making causal inferences and extrapolating the descriptive results to the entire population from which the sample was drawn. Second, all investigated items were measured through self-reports. While this is a frequently used technique in public health research, it could potentially lead to recall bias. Third, the L-CIS included only 1-item questions for the measurement of perceived susceptibility and perceived severity. Furthermore, media exposure was determined by viewing hours, and did not measure the content users had been exposed to. Finally, it is possible that the respondents who agreed to participate in this study were more health conscious individuals, which could have led to a selection bias.

In order to address these shortcomings, it is recommended that future research further examine these preliminary findings

among other samples and with different measures. First of all, the role of perceived health needs to be examined in more detail. Contrary to the expectations, the results of the current study seem to imply that perceived health might play a role in the relationship between media use and fear while actual health (having had a cancer diagnosis or not) does not. Future research should look more closely at this. Experimental designs could also be very interesting to overcome the limitations of self-reported surveys. Future research should also investigate other antecedents of fear of cancer and should examine when fear of cancer leads to positive outcomes and when fear has negative outcomes. Furthermore, future research could benefit from content analyses of television and Internet content concerning cancer information, to investigate whether the content and the genres are related to levels of fear. Finally, it could be interesting to examine ways in which to incorporate television in providing correct information to a lay audience.

Acknowledgments The authors would like to thank all the respondents who were willing to fill out the questionnaire. Additionally, the authors would also like to thank the reviewers for their comments on an earlier version of this manuscript. This research was funded by the Research Foundation Flanders (Grant No. G0A4212N). The funding source had no involvement in the selection of respondents, questionnaire design, item selection, analyses, conclusions, or writing of the text.

Conflict of Interest The authors indicate no potential conflicts of interest.

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